

CLAIMS

What is claimed is:

1. A method for constructing a viewed component of an instrument cluster, comprising:

providing a planar sheet to serve as a basis of the viewed component;

applying a first layer onto a front side surface of the planar sheet, the first layer having a top surface, a bottom surface and an outer boundary area, wherein the bottom surface faces the planar sheet and the outer boundary area is formed as a dispersing dot pattern; and

applying a second layer onto the surface of the planar sheet, wherein at least a portion of the second layer overlays the first layer, thereby forming the viewed component.

2. The method of Claim 1 wherein the second layer having an inner surface facing the top surface of the first layer and an outer surface serving as a visible face of the viewed component.

3. The method of Claim 1 wherein the dot pattern includes a plurality of spatially separated dots, such that spatial separation between dots gradually increases along a direction outwardly from the outer boundary area of the first layer.

4. The method of Claim 1 wherein the dot pattern includes a plurality of spatially separated dots having a cylindrical shape, such that a radial dimension for the dots gradually decreases in a direction outwardly from the outer boundary area of the first layer.

5. The method of Claim 1 wherein the step of applying a first layer onto a surface of the planar sheet further comprises printing a colored ink onto a polycarbonate sheet.

6. The method of Claim 1 wherein the step of applying a second layer onto the surface of the planar sheet further comprises printing a colored ink onto a polycarbonate sheet.

7. The method of Claim 2 wherein the step of applying a second layer causes the outer boundary area to exhibit a profile which slopes gradually downward from the top surface towards the planar sheet, thereby reducing the visible appearance of a pronounced step line on the face of the viewed component.

8. A viewed component of a vehicle instrument cluster, comprising:

a planar sheet;

an underlying layer printed on a surface of the planar sheet, the underlying layer having an outer surface, an inner surface and an outer boundary area, such that the inner surface faces the planar sheet and the outer boundary area is formed as a dispersing dot pattern; and

an outer layer printed onto the surface of the planar sheet, wherein at least a portion of the outer layer overlays the underlying layer.

9. The viewed component of Claim 8 wherein the dot pattern includes a plurality of spatially separated dots, such that spatial separation between dots gradually increases along a direction outwardly from the outer boundary area of the first layer

10. The viewed component of Claim 8 wherein the dot pattern includes a plurality of spatially separated dots having a cylindrical shape, such that a radial dimension for the dots gradually decreases in a direction outwardly from the outer boundary area of the first layer.

11. The viewed component of Claim 8 wherein the outer layer having an inner surface facing the outer surface of the underlying layer and an outer surface serving as a visible face of the viewed component.

12. The viewed component of Claim 11 further comprises an intermediate layer interposed between the planar sheet and the underlying layer and having an outer boundary that extends outside the outer boundary area of the underlying layer.

13. The viewed component of Claim 8 wherein the planar sheet is comprised of a polycarbonate material.

14. The viewed component of Claim 8 wherein the underlying layer is further defined as a colored ink applied to the planar sheet by a silk screen printing process.

15. A method for assembling a viewed component of an instrument cluster, comprising:

providing a planar sheet to serve as a basis of the viewed component;

applying a first layer onto a backside surface of the planar sheet;

applying a second layer onto the backside surface of the planar sheet, wherein the second layer overlays a portion of the first layer and defines an outer surface, an inner surface and an outer boundary area, the inner surface facing the first layer and the outer boundary area is formed as a dispersing dot pattern, thereby forming the viewed component; and

subjecting the viewed component to a deformation process, thereby causing the outer boundary area to exhibit a sloped profile.

16. The method of Claim 15 wherein the dot pattern includes a plurality of spatially separated dots, such that spatial separation between dots gradually increases along a direction outwardly from the outer boundary area of the first layer.

17. The method of Claim 15 wherein the dot pattern includes a plurality of spatially separated dots having a cylindrical shape, such that a radial dimension for the dots gradually decreases in a direction outwardly from the outer boundary area of the first layer.

18. The method of Claim 15 wherein the step of applying a first layer onto a backside surface of the planar sheet further comprises printing a colored ink onto a polycarbonate sheet.

19. The method of Claim 15 wherein the step of applying a second layer onto the surface of the planar sheet further comprises printing a colored ink onto a polycarbonate sheet.